Chapter VIII: Glossary

Glossary of Terms

100-year floodplain: The area along the river corridor that would receive floodwaters during a 100-year flood event. A 100-year flood event has the probability of occurring 1% of the time during any given year. If a 100-year flood event occurs, the following year will still have the same probability for occurrence of a 100-year event. For the purposes of this environmental assessment, the 100-year floodplain also includes wetlands associated with the hydrologic and ecological processes of the river.

Abutment: A structure that supports the end of a dam.

Affected environment: Existing biological, physical, social, and economic conditions of an area that are subject to change, both directly and indirectly, as a result of a proposed human action.

Alluvial: An adjective referring to alluvium, which are sediments deposited by erosional processes, usually by streams.

Alluvium: A general term for clay, silt, sand, gravel, or similar unconsolidated rock fragments or particles deposited during comparatively recent geologic time by a stream or other body of running water.

Alternatives: Sets of management elements that represent a range of options for how, or whether to proceed with a proposed project. An environmental assessment analyzes the potential environmental and social impacts of the range of alternatives presented.

Aquifer: A geologic formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Backhoe: An excavator whose bucket is rigidly attached to a hinged pole on the boom and is drawn backward to the machine when in operation.

Bankfull mark: The height (or stage) of the stream that just fills the stream channel. Any additional water would begin to more rapidly widen the stream and might lead to water overflowing out into the floodplain.

Bed and bank: The area below the ordinary high water mark in a river or stream. The ordinary high water mark is defined by the U.S. Army Corps of Engineers as the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area.

Basin: Refers to a drainage basin. A region or area bounded by a drainage divide and occupied by a drainage system. Specifically, an area that gathers water originating as precipitation and contributes it to a particular stream channel or system of channels. Synonym: watershed.

Batholith: Refers to a very large body of plutonic rock. The Sierra Nevada batholith comprises several smaller plutons that represent the repeated intrusions of granitic magma. From the Greek *bathos,* deep, and *lithos*, rock.

Bed: Refers to the relatively flat or level bottom (substrate) of a body of water, as in a lakebed or riverbed.

Bedload: Material (e.g., sand, gravel, and cobbles) carried by a river. It is typically suspended in the water column with high enough flow velocities, and then deposited when flow velocities slow.

Benign neglect: A hypothetical management construct of the No Action Alternative. A policy of taking no action instead of managing or improving the situation.

Best management practices: Effective, feasible (including technological, economic, and institutional considerations) conservation practices and land- and water-management measures that avoid or minimize adverse impacts to natural and cultural resources. Best Management Practices may include schedules for activities, prohibitions, maintenance guidelines, and other management practices.

Biodiversity: Biodiversity, or biological diversity, is generally accepted to include genetic diversity within species, species diversity, and a full range of biological community types. The concept is that a landscape is healthy when it includes stable populations of native species that are well distributed across the landscape.

Biogengineered bank stabilization system: A bank stabilization method utilizing native vegetation and boulders to prevent erosion and match the biological, visual, and structural characteristics of the upstream and downstream riverbanks.

Boundaries: The areas that receive protection under the Wild and Scenic Rivers Act. Boundaries include an average of not more than 320 acres of land per mile, measured from the ordinary high water mark on both sides of the river.

Coffer dam: A temporary, watertight enclosure that is pumped dry to expose the bottom of a body of water so that construction may be undertaken.

Council on Environmental Quality regulations: The Council on Environmental Quality was established by the National Environmental Policy Act and given the responsibility for developing federal environmental policy and overseeing the implementation of National Environmental Policy Act by federal agencies.

Chert: A dense sedimentary rock containing quartz, possibly opal, calcite, and remains of siliceous and other organisms. Ancient seafloor deposits.

Classifications: The status of rivers or river segments under the Wild and Scenic Rivers Act ("wild," "scenic," or "recreational"). Classification is based on the existing level of access and human alteration of the site.

Comprehensive management plan: A programmatic plan to protect and enhance a Wild and Scenic River. The *Merced Wild and Scenic River Comprehensive Management Plan* is the National Park Service's comprehensive management plan for segments of the Merced River corridor under its jurisdiction.

Crownsprout: An adaptation of plants to produce new growth from a stump or burl typically damaged by cutting or fire. New growth often appears as circular or crown-like.

Day excursion visitor: One of two categories of day visitors. These are visitors who do not spend the night in the park or in the surrounding local counties, spending only one day in Yosemite before leaving the region to spend the night at home or in lodging outside the area. The other category of day visitors stay overnight locally outside of the park (the surrounding region consisting of Madera, Mariposa, Merced, Mono, and Tuolumne Counties) as part of their visit to Yosemite (referred to as "local overnighter").

Day visitor: Visitors that do not stay overnight in the park. Includes both local overnighters and day excursion visitors.

Ecosystem: An ecosystem can be defined as a geographically identifiable area that encompasses unique physical and biological characteristics. It is the sum of the plant community, animal community, and environment in a particular region or habitat.

El Portal Administrative Site: The area outside the western boundary of the park along Highway 140 under the jurisdiction of the National Park Service used to locate park operations and administrative facilities for Yosemite National Park.

Eluviation: The washing out of fine soil components.

Emergent wetland: A wetland characterized by frequent or continual inundation dominated by herbaceous species of plants typically rooted underwater and emerging into air (e.g., cattails, rushes). The emergent wetland class is characterized by erect, rooted, herbaceous hydrophytes (e.g., cattails, rushes), excluding mosses and lichens. This vegetation is present for most of the growing season in most years. Perennial plants usually dominate these wetlands. All water regimes are included, except sub-tidal and irregularly exposed.

Environmental assessment (EA): A public document required under the National Environmental Policy Act (NEPA) that identifies and analyzes activities that might affect the human and natural environment. An environmental assessment is a concise public document which provides sufficient evidence and analysis for determining whether to prepare an EIS, aids an agency's compliance with NEPA when no EIS is necessary, and it facilitates preparation of an EIS when one is necessary.

Environmental impact statement (EIS): A public document required under the National Environmental Policy Act (NEPA) that identifies and analyzes activities that might affect the human and natural environment.

Excavator: A piece of heavy equipment that is used to dig or scoop material with a bucket attached to a hinged pole and a boom.

Facilities: Buildings and the associated supporting infrastructure such as roads, trails, and utilities.

Finding of No Significant Impact (FONSI): The public document describing the decision made on selecting the "preferred alternative" in an environmental assessment. See "environmental assessment."

Fire return interval: The typical period of time between naturally occurring fires.

Floodplain: A nearly level alluvial plain that borders a stream and is subject to flooding unless protected artificially.

Fluvial: Of or pertaining to a river. Fluvial is a technical term used to indicate the presence or interaction of a river or stream within the landform.

Fluvial geomorphic response: The interaction of a flowing river with the surrounding landform.

Free-flowing condition: Existing or flowing in natural condition without impoundment, diversion, straightening, riprapping, or other modification of the waterway (as defined in the Wild and Scenic Rivers Act – 16 United States Code 1286 [b]).

Glacial till: Unconsolidated mixtures of clay, silt, sand, and gravel deposited directly by and underneath a glacier without being reworked by melt water.

Glaciation: Effects on landforms produced by the presence and movement of a glacier.

Geomorphic: Of or pertaining to the form of the Earth or of its surface features.

Grader: A piece of heavy equipment used to level or smooth road or other surfaces to desired gradient.

Granitic rocks: Igneous rocks (intrusive magma) that have cooled slowly below the Earth's surface typically consisting of quartz, feldspar, and mica. In contrast to granitic rocks, if magma erupts at the Earth's surface, it is referred to as lava. Lava, when cooled, forms volcanic rocks.

Gravity wall: A gravity retaining wall is typically composed of unreinforced concrete or soil. If made of soil, the wall generally consists of a facia and one or more layers of reinforcing member (geotextile, grid, metal strips, etc.) that extend from the facia back into the soil mass. Gravity retaining walls must be built to withstand pressures applied by the retained soil. This force, "lateral earth pressure," is dependent upon several parameters, including the geometry of the wall and the characteristics of the retained soil.

Hazardous material: A substance or combination of substances, that, because of quantity, concentration, or physical, chemical, or infectious characteristics, may either: (1) cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Hazardous waste: Hazardous wastes are hazardous materials that no longer have practical use, such as substances that have been discarded, spilled, or contaminated, or that are being stored temporarily prior to proper disposal.

Headcut: Degradation that moves headward, or an incision that proceeds upstream as a result of turbulent energy dissipation such as local scour.

Headwaters: The point or area of origin for a river or stream.

Herbaceous wetland plant: An annual, biennial, or perennial hydrophyte (see below) that does not develop persistent woody tissue (bark), but dies at the end of the growing season.

Hydric soil: Soil that is wet long enough to periodically produce anaerobic (without oxygen) conditions.

Hydrodynamics: The flow, fluctuation, and character of water once in a wetland or system.

Hydrophytes: Any plant growing in water or in a substrate that is at least periodically deficient in oxygen as a result of excessive water. Plants typically found in wetland habitats.

Hydrogeomorphic classification: A wetland classification system that distinguishes wetland features based on position in the landscape, geomorphic setting, and hydrodynamics.

Hydrologic response: The response of a watershed due to precipitation. Usually refers to the resulting streamflow from a precipitation event.

Illuviation: Process of deposition (in-washing) of soil materials either from suspension or solution, and usually into a lower soil horizon, after removal from above or from lateral source.

Intrusive: A body of magma that is injected or is intruded into the pre-existing rock.

Impoundment: A dam or other structure to obstruct the flow of water in a river or stream.

Liquefaction: A process by which water-saturated materials (including soil, sediment, and certain types of volcanic deposits) lose strength and may fail during strong groundshaking. The transformation of granular material from a solid state into a liquefied state as a consequence of increased pore-water pressure.

Local overnighter: One of two categories of day visitors. These are visitors who stay overnight locally outside of the park as part of their visit to Yosemite (the surrounding region consisting of Madera, Mariposa, Merced, Mono, and Tuolumne Counties). The other category of day visitors does not spend the night in the park or in the surrounding local counties, spending only one day in Yosemite before leaving the region to spend the night at home or in lodging outside the area (referred to as “day excursion visitor”).

Main stem (Merced River): The sections of the Merced River beginning at the headwaters near the Sierra Crest and continuing through Yosemite Valley, the Merced River gorge, El Portal, and further downstream.

Management zone: A geographical area for which management directions or prescriptions have been developed to determine what can and cannot occur in terms of resource management, visitor use, access, facilities or development, and park operations. One of the seven management elements prescribed in the *Merced Wild and Scenic River Comprehensive Management Plan*.

Metamorphic rock: Metamorphic refers to rocks derived from pre-existing rocks by mineralogical, chemical, structural changes.

Mitigation: Activities that will avoid, reduce the severity of, or eliminate an adverse environmental impact.

Moraine: Debris, such as boulders, stones, or sediment deposited by a glacier.

National Environmental Policy Act (NEPA): The federal act that requires the development of an environmental assessment or environmental impact statement for federal actions that might have environmental, social, or other impacts.

Natural processes: All processes (such as hydrologic, geologic, ecosystemic) that are not the result of human manipulation.

Nephelometric Turbidity Unit (NTU): Units in which turbidity in water is measured, calculated qualitatively by measuring how light is scattered by suspended particulate material in a sample of water.

No Action Alternative: The alternative in a plan that proposes to continue current management direction. "No action" means the proposed activity would not take place, and the resulting environmental effects from taking no action would be compared with the effects of permitting the proposed activity or an alternative activity to go forward.

Non-motorized watercraft: A class of boats that includes rafts, kayaks, inner tubes, and inflatable air mattresses.

Non-native species: Species of plants or wildlife that are not native to a particular area and often interfere with natural biological systems.

Nonpoint pollution sources: Pollutants that enter the environment from locations that generally are not contained. Examples of nonpoint sources are roadways, parking lots, and landscaped areas. Pollutants from these locations can include petrochemicals, heavy metals, and fertilizers.

Non-wilderness: Areas that have not been designated for special protection under the Wilderness Act.

Ordinary high water: The line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area.

Outstandingly Remarkable Values: Those resources in the corridor of a Wild and Scenic River that are of special value and warrant protection. Outstandingly Remarkable Values are the "scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values…that shall be protected for the benefit and enjoyment of present and future generations" (16 United States Code 1272).

Paleoenvironment: Ancient environment.

Palustrine: The palustrine system was developed to group the vegetated wetlands traditionally called by such names as marsh, swamp, bog, fen, and prairie, which are found throughout the United States. It also includes the small, shallow, permanent, or intermittent water bodies often called ponds. Palustrine wetlands may be situated shoreward of lakes, river channels, or estuaries; on river floodplains; in isolated catchments; or on slopes. They may also occur as islands in lakes or rivers. The palustrine system includes all nontidal wetlands dominated by trees, shrubs, persistent emergents, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5%. It also includes wetlands lacking such vegetation, but with all of the following four characteristics: (1) area less than 8 hectares (20 acres); (2) active wave-formed or bedrock shoreline features lacking; (3) water depth in the deepest part of basin less than 2 meters at low water; and (4) salinity due to ocean-derived salts less than 0.5%.

Particulate matter (PM-10 and PM-2.5): Fractions of particulate matter characterized by particles with diameters of 10 microns or less (PM-10) or 2.5 microns or less (PM-2.5). Such particles can be inhaled into the air passages and the lungs and can cause adverse health effects. High levels of PM-2.5 are also associated with regional haze and visibility impairment.

Penstock: A pipe or conduit used to carry water to a water wheel or turbine.

Pluton: A general term applied to any body of intrusive igneous rock that originates deep in the earth. Named for Pluto, Greek god of the underworld.

Prescription: A guideline that directs the management of a specific area by describing the type and intensity of activities, facilities, and park operations that can and cannot occur. See "management zone."

Pristine: Unaltered, unpolluted by humans.

Protohistoric: Immediately before written history.

Record of Decision (ROD): The public document describing the decision made on selecting the "preferred alternative" in an environmental impact statement. See "environmental impact statement."

Riffle (riffle/pool): A riffle is part of the natural sequence of a stream pattern as it alters between riffles and pools in the linear direction. Riffles are the steeper, shallower areas where turbulence is usually present due to shallow water flowing over the channel substrate. Pools are the calmer, less steep areas where deeper water is present, typically in a wider channel width. Additionally, there are glides that are linear stream areas where no turbulence is present due to sufficiently deep water but stream velocities are higher than typical of pool areas. Glides are usually not as wide across the stream channel as compared to pools.

Riparian areas: The land area and associated vegetation bordering a stream or river.

Riprap: A layer of large, durable fragments of broken rocks specially selected and graded, thrown together irregularly or fitted together to prevent erosion by waves or currents.

Riverine: Of or relating to a river. A riverine system includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts in excess of 0.5%. A channel is an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water.

River corridor: The area within the boundaries of a Wild and Scenic River (e.g., the Merced River corridor).

River-left: Directional reference for viewing rivers, with the orientation of one standing in the middle of the river looking downstream. River-left is the left-hand side of the river when one is looking downstream.

River-right: Directional reference for viewing rivers, with the orientation of one standing in the middle of the river looking downstream. River-right is the right-hand side of the river when one is looking downstream.

River Protection Overlay: A buffer area within and adjacent to the river that allows for the protection and restoration of natural and aquatic ecosystem processes. At Cascades Diversion Dam, it includes the river channel itself and extends 150 feet from the ordinary high water mark. Downstream of the dam, it includes the river channel itself and extends 100 feet from the ordinary high water mark. One of seven management elements prescribed in the *Merced Wild and Scenic River Comprehensive Management Plan*.

Rockfall talus zone: The area extending out from the talus zone, the area in which individual rocks may travel outward from the talus.

Sediment: A particle of soil or rock that was dislodged, entrained, and deposited by surface runoff or a stream. The particle can range in size from microscopic to cobble stones.

Screenhouse: A structure consisting of a metal screenwalls that allows the intake and flow of water while preventing the entrance of debris and animals (birds and fish) into the penstock and turbine area of a hydroelectric dam.

Shoulder season: The nonpeak park visitation season on either side of peak summer months. For example, the calendar months of April, May, September, and October are included in the shoulder season.

Skid steer loader: A piece of machinery used to lift and transport heavy material with a bucket attachment. The term “skid steer” refers to the loader’s unique steering system, which allows it to turn 360-degrees within its own length.

Snag: A standing dead tree.

South Fork (Merced River): The segments of the Merced River passing through Wawona and entering the main stem west of El Portal.

Steel sheetpiling: A manufactured construction material that is driven into the soil to create a rigid barrier for earth and water, while resisting the lateral pressures of those bending forces. Each section or "sheet" has a mechanical connection "interlock" at both ends that interlock with one another to form a continuous wall of sheeting.

Succession: The process by which vegetation recovers following a disturbance or initially develops on an unvegetated site.

Talus: Rock fragments of any size or shape derived from and lying at the base of a cliff or very steep rocky slope. Also refers to outward sloping and accumulated heap of loose broken rock considered as a unit and formed primarily by falling, rolling, and sliding.

Talus zone: Area where the majority of rock materials are deposited during a mass movement (rockfall) event.

Thumb attachment: A device added to the arm of a backhoe that increases an excavator's versatility and efficiency when handling bulky materials; rather than function merely as a scoop, the attachment enables the backhoe to grab material.

Till: Glacially transported and unconsolidated material deposited directly by ice, without having been reworked by melt-water. Material size varies widely and can range from clay to boulders.

Threatened and endangered species: Species of plants that receive special protection under state and/or federal laws. Also referred to as "listed species" or "endangered species."

User capacity: As it applies to parks, user capacity is the type and level of visitor use that can be accommodated while sustaining the desired resource and social conditions based on the purpose and objectives of a park unit.

U-shaped valley: A glacially carved valley having a pronounced parabolic cross-sectional profile suggesting the form of a broad letter "U" and characterized by steep sides and a nearly flat bottom.

Vibratory methods: A method of installing sheetpiling into the ground by driving the piles with intense blows of force.

Visitor experience: The perceptions, feelings, and reactions a park visitor has in relationship with the surrounding environment.

Visitor Experience Resource Protection (VERP) framework: A process developed for the National Park Service to help manage the impacts of visitor use on the visitor experiences and resource conditions in national parks. One of the seven management elements prescribed in the *Merced Wild and Scenic River Comprehensive Management Plan*.

Volant: Capable of flying.

V-shaped valley: A valley having a pronounced cross-profile suggesting the letter "V" and characterized by steep sides and short tributaries. Specifically, a young narrow valley resulting from downcutting by a stream.

Water resources project: Any dam, water conduit, reservoir, powerhouse, transmission line, or other works project under the Federal Power Act, or other developments that would affect the free-flowing characteristics of a wild and scenic or congressionally authorized study river. In addition to projects licensed by the Federal Energy Regulatory Commission, water resources projects may also include: dams, water diversions, fisheries habitat and watershed restoration, bridges and other roadway construction/reconstruction projects, bank stabilization projects, channelization projects, levee construction, boat ramps, fishing piers, and activities that require a Section 404 permit from the U.S. Army Corps of Engineers (Interagency Wild and Scenic Rivers Coordinating Council 1999).

Watershed: The region drained by, or contributing water to, a stream, lake, or other body of water. Synonym**:** basin or drainage basin.

Wetland: Wetlands are defined by the U.S. Army Corps of Engineers (Code of Federal Regulations, Section 328.3[b], 1986) as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands, as defined by the U.S. Fish and Wildlife Service (often referred to as the Cowardin classification system) (USFWS 1979), and adopted by the National Park Service, are lands in transition between terrestrial and aquatic systems, where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following attributes: the land supports predominantly hydrophytes, at least periodically; the substrate is predominantly undrained hydric soils; and/or the substrate is saturated with water or covered by shallow water at some time during the growing season of each year.

Wild and Scenic Rivers: Those rivers receiving special protection under the Wild and Scenic Rivers Act.

Wilderness: Those areas protected by the provisions of the 1964 Wilderness Act. These areas are characterized by a lack of human interference in natural processes.

Wilderness Act of 1964: The Wilderness Act restricts development and activities to maintain certain places where wilderness conditions predominate.

Acronyms

APCD	Air Pollution Control District
AQMD	Air Quality Management District
BLM	Bureau of Land Management
BMP	Best management practice
CBA	Choosing by Advantage
CDFG	California Department of Fish and Game
CDMG	California Department of Mines and Geology
CEQ	Council on Environmental Quality
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	Cubic feet per second
CNDDB	California Natural Diversity Database
USCOE/Corps	U.S. Army Corps of Engineers
CPI	Consumer Price Index
CSP	Concession Services Plan
dB	Decibels
dBA	Decibels on the "A" weighted scale
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
FESA	Federal Endangered Species Act
GMP	General Management Plan
gpd	Gallons per day
gpm	Gallons per minute
HVAC	Heating, Ventilation, and Air Conditioning
IWSRCC	Interagency Wild and Scenic Rivers Coordinating Council
kWh	Kilowatt hour
L_{eq}	Energy equivalent level
MCAPCD	Mariposa County Air Pollution Control District
Mm^{-1}	Inverse megameters
MOU	Memorandum of Understanding
msl	Mean sea level
mya	Million years ago
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NO_X	Nitrogen Oxide

NPS	National Park Service
NRI	National Rivers Inventory
NTU	Nephelometric Turbidity Unit
NWI	National Wetlands Inventory
ORVs	Outstandingly Remarkable Values
PA	Programmatic Agreement
PG&E	Pacific Gas and Electric Company
PM-10	Particulate matter
PSD	Prevention of Significant Deterioration
RAP	Restricted Access Plan
RV	Recreational vehicle
ROD	Record of Decision
RPO	River Protection Overlay
RWQCB	Regional Water Quality Control Board
SHPO	State Historic Preservation Officer
SNEP	Sierra Nevada Ecosystem Project
SIP	State Implementation Plan
SJVUAPCD	San Joaquin Valley Unified Air Pollution Control District
TES	Threatened and Endangered Species
USC	United States Code
USDOI	United States Department of the Interior
USEPA	United States Environmental Protection Agency
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VERP	Visitor Experience and Resource Protection
VOC	Volatile Organic Compound
YARTS	Yosemite Area Regional Transportation System
YCS	Yosemite Concession Services Corporation
YNI	Yosemite National Institutes
YVP	Yosemite Valley Plan